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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,936	10/05/2000	Benjamin Y.H. Liu	M419.12-0021	7889

7590

02/21/2003

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EXAMINER

SIEFKE, SAMUEL P

ART UNIT	PAPER NUMBER
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1743

5

DATE MAILED: 02/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/679,936

Applicant(s)

LIU ET AL.

Examiner

Samuel P Siefke

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AS-5

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 6-8, 15-27, 33 and 34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) ~~1-34~~ 7-15, 9-14, 28-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-34 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-5, 9-14 and 28-32, drawn to a process for obtaining samples from a cascade impactor, classified in class 436, subclass 174.
- II. Claims 6-8, drawn to method of cleaning an impactor, classified in class 134, subclass 32.
- III. Claims 15-19, drawn to apparatus for dissolution of particles held on impaction surface, classified in class 424, subclass 489.
- IV. Claims 20-27, drawn to an apparatus for handling cup shaped impactor devices, classified in class 73, subclass 12.08.
- V. Claims 33 and 34, drawn to method of coating impactor surfaces, classified in class 427, subclass 129.

Inventions Group I and Group III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by hand, using a pipet to spray the wash solution into the chamber then use gravity to drain the collection container to collect the sample.

Inventions Group I and Group II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as

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claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the drying step by using a drying fluid, does not need to take place all the time, but only for the application of the anti-bounce reagent. The subcombination has separate utility such as apply an anti-bounce reagent in the absence of a drying fluid by allowing the impaction surface to dry over time instead of decreasing the drying time with a drying fluid.

Inventions Group I and Group IV are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by hand, using a pipette to spray the wash solution into the chamber then use gravity to drain the collection container to collect the sample.

Inventions Group V and Group III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by hand, spraying a solution of anti-bounce coating on the impaction surface then pouring a drying fluid over the coating and allow time to dry.

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Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II or III or IV or V, restriction for examination purposes as indicated is proper.

During a telephone conversation with Nickolas E. Westman on January 30, 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-5, 9-14 and 28-32. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-8, 15-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

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(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims **1-5, 9-14** and **28-32** are rejected under 35 U.S.C. 102(e) as being anticipated by Call et al. (USPN 6,267,016).

Call discloses an impact particulate collector using a rotary impeller for collecting particulates and moving a fluid that comprises a plurality of impaction surfaces (col. 4, lines 38-47; impeller vanes 24, plate 22, annular plate 26, inner surface 74 of cavity 14); supporting the plurality of impactor components in a support and are enclosed (the housing 12 defines an internal cylindrical cavity 14 which encloses all the impaction surfaces and components); injecting a solvent solution into the enclosure containing an impactor surface (col. 2, line 66 – col. 3, line 8); agitating (washing) the solvent applied by moving (rocking) the support so that a plurality of the impactor surfaces are agitated simultaneously (refer to the collector and fan, which when the fan is on the (col. 7, lines 10-28) the rotational speeds which agitates the solvent applied by moving (rocking) the support (fan) so that a plurality of the impactor surfaces are agitated simultaneously (this would be the impeller vanes that are agitated simultaneously)(also col. 7, line 29- col. 8, line 16)); removing a desired amount of liquid for a sample from the enclosure (col. 5, line 10 – col. 6, line 45; col. 8, lines 55-62); transferring the collected samples to vials for an analyzation instrument (col. 6, lines 18-51); drying the plurality of impaction surfaces simultaneously with a flow of gas (when the fan is turned on this creates a flow of gas that would dry the impaction surfaces); coating the impactor plates with an anti-bounce coating while dry (col. 3, lines 31-40; col. 7, line 66- col. 8, line 16) (fig. 1-7).

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Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel P Siefke whose telephone number is 703-306-0093. The examiner can normally be reached on M-F 7:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 703-308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9311 for regular communications and 703-872-9310 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

SPS
February 12, 2003




Jill Warden
Supervisory Patent Examiner
Technology Center 1700